

Notice of Allowability

Application No.

10/698,818

Examiner

Patricia L. Hailey

Applicant(s)

THOMPSON ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed on December 20, 2004.
2. ☒ The allowed claim(s) is/are 1-13 and 22-29.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Applicants' remarks and amendments, filed on December 20, 2004, have been carefully considered. Claims 14-21, drawn to a non-elected method for carrying out a water gas shift reaction, have been canceled; no new claims have been added.

Claims 1-13 and 22-29 remain pending in this application.

Support for the amendments to claims 1, 10, 22, 28, and 29 can be found in the Specification at paragraphs [0021] and [0028].

Withdrawn Rejections

The 102(b) rejection of claims 1-4, 7-13, and 22-29 as being anticipated by Thompson et al. (U. S. Patent No. 6,297,185), and the 103(a) rejection of claim 6 as being unpatentable over Thompson et al. (U. S. Patent No. 6,297,185), stated in the previous Office Action, has been withdrawn in view of Applicants' amendments, and in view of Applicants' persuasive arguments regarding these rejections.

Allowable Subject Matter

1. Claims 1-13 and 22-29 are allowed.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or suggest the claimed catalyst composition comprising a late transition metal held upon a support, said support

comprising a material having the formula $\text{Mo}_a\text{W}_{2-a}\text{C}_b\text{N}_{1-b}$, wherein $0 < a \leq 2$ and $0 \leq b \leq 1$, and wherein the transition metal is loaded onto the support without exposing said support to air.

The prior art also does not teach or reasonably suggest the claimed method of preparing a supported transition metal composition, said method comprising a step wherein an unpassivated solid group 6 metal carbide or nitride is brought into contact with an aqueous solution of a late transition metal without exposing the metal carbide or nitride to air.

Thompson et al. (U. S. Patent No. 6,297,185), while teaching a catalyst comprised of a support body that is a transition metal based, electrically conductive ceramic, and of at least one noble metal supported on the support body (col. 2, lines 24-39 and col. 1, lines 26-34), as well as teaching a method for producing said catalyst, wherein, for example, hexachloroplatinic acid is dissolved in methanol to produce a solution, to which is added a tungsten carbide ceramic powder, the methanol is removed via evaporation, and the powder is placed in a tube. Through which a mixture of hydrogen and nitrogen is flowed, and the tube is heated, and as a result reduction of the chloroplatinic acid takes place. Following reduction, a passivating atmosphere comprising 1% oxygen and the balance nitrogen and temperature adjustment to 350°C is created within the tube.

Applicants' claims in their present form require an unpassivated support, and recite that the transition metals are loaded onto the support without exposure to air.

Further, Thompson et al. refer to U. S. Patent No. 5,680,292 (Thompson, Jr., et al.) for preparation of Patentees' tungsten carbide ceramic powder, which was cited by the Examiner in the previous Office Action as prior art. In '292, the tungsten carbide powder is produced by method steps including passivation. See col. 4, line 46 to col. 5, line 35 of the '292 patent, where MoO₃ films are nitrided and then passivated in a flowing mixture of 1.06% oxygen in helium.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patricia L. Hailey whose telephone number is (571) 272-1369. The examiner can normally be reached on Mondays-Thursdays.

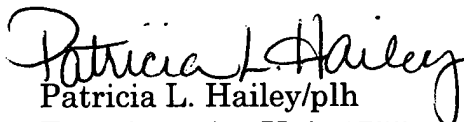
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on (571) 272-1362. The fax

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phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group 1700 Receptionist, whose telephone number is (571) 272-1700.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Patricia L. Hailey/plh
Examiner, Art Unit 1755
January 21, 2005


DAVID SAMPLE
PRIMARY EXAMINER